Remarks

In the Office Action, the Examiner rejected claims 1 - 4, 7 - 12, 16 - 22, 26 - 28, 32 - 36, and 40 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,963,641 ("Crandall"). The Examiner also objected to claims 5, 6, 13 - 15, 23 - 25, 29 - 31, and 37 - 39 as being dependent upon a rejected based claim but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicant sincerely appreciates the Examiner's indication of allowable subject matter but respectfully traverses each of the Examiner's rejections and submits the following arguments in favor of patentability.

Claims 1 - 6

In claim 1, the Applicant recites a method that includes identifying a presentation object to be included in a print job. The method also includes recognizing each combination of presentation parameters associated with each appearance of the presentation object within the print job and rasterizing the presentation object according to each recognized combination of presentation parameters to create a rasterized object for each combination. The method also includes caching each rasterized object in a local storage and utilizing the appropriate rasterized object from storage for printing a portion of the print job requiring inclusion of the presentation object.

The Examiner states that Crandall discloses each of these limitations. The Applicant respectfully disagrees as Crandall is not even directly associated with printing. For example, the Examiner states that Crandall teaches identifying at least one presentation object to be included in a print job at column 5, lines 15 - 24 where Crandall states that "the information must be gleaned from the structure of the document file itself". This statement however is not related to printing. Rather, this statement and all of Crandall in general relates to automatic "proofing" of a document before the document is transmitted. In this regard, Crandall states that one of the problems associated with prior art software is that the software does not address errors that might have occurred prior to generation of a print-type file (see e.g., column 3, lines 42 – 44 of Crandall). Crandall then states that "the purpose of the present invention... is to provide an improved method of opening, examining, and evaluating electronically-recorded documents, prior to printing" at column 3, lines 59 - 62. Crandall also states that "the present invention enables a user to efficiently proof electronically recorded documents prior to printing,

transmission or recording" at column 4, lines 31 - 33. The Applicant's claims, on the other hand, recite rasterizing which is the process of converting an image into pixels for printing. In this regard, the Applicant's claims recite rasterizing a presentation object (e.g., an image) to create a rasterized object that is cached in local storage and used when a portion of a print job requires inclusion of the presentation object. Crandall does not teach rasterizing any presentation objects to be included in a print job. And, because Crandall does not teach rasterizing as the Applicant claims, claim 1 is patentable in view of Crandall and the Applicant respectfully requests such disposition.

Claims 2 - 6 depend from independent claim 1 and inherit all of the patentable features of the independent claim. Accordingly, claims 2 - 6 are also patentable and the Applicant respectfully requests such disposition. However, claims 2 - 6 recite additional subject matter that further distinguishes from Crandall. For example, claim 4 recites selecting at least one category of blocked errors to be ignored during printing and, if an unblocked error occurs during the rasterization of the presentation object, aborting the rasterization whereby the presentation object will be rasterized during printing and the unblocked error reported. The Examiner states that Crandall teaches such at column 5, lines 45 - 65 and with the item number 36 in Figure 1. The Applicant respectfully disagrees. Here, Crandall teaches reporting, to a user, errors in a document. Nowhere, however, does Crandall teach ignoring errors associated with a print job such that rasterization is aborted until an object is printed during the print job. Accordingly, Crandall does not teach that which the Applicant claims in claim 4.

Claims 7 - 9

In claim 7, the Applicant recites a method that includes identifying at least one presentation object to be included in a print job. The method also includes recognizing each combination of presentation parameters associated with each appearance of the presentation object within the print job. Additionally, the method includes, for each combination, creating a preRIP command identifying the presentation object and the associated presentation parameters. The preRIP command directs a printer to rasterize the identified presentation object according to the identified combination of parameters and to cache the rasterized object for later printing. The method also includes sending each preRIP command to a printer.

The Examiner rejected claim 7 based on the same reasons recited in the rejection of claim 1. However, the Examiner never addressed where Crandall teaches creating a preRIP command that directs a printer to rasterize the identified presentation object according to the identified combination of parameters. Instead, the Examiner merely associated the rejection of claim 1 with each pending independent claim without addressing the elements of the other independent claims. All claim limitations must be considered.

As mentioned in the arguments in favor of patentability for claim 1, Crandall does not teach a process that is associated with rasterization. In this regard, Crandall does not teach a preRIP command that identifies a presentation object and its associated parameters. Nor does Crandall teach sending any such preRIP command to a printer. In fact, nothing in Crandall supports preRIP commands or their uses with rasterizing in the context of printing. Accordingly, Crandall does not teach that which the Applicant claims in claim 7. For at least these reasons, claim 7 is patentable in view of Crandall and the Applicant respectfully requests such disposition.

Claims 8 and 9 depend from independent claim 7 and inherit all of the patentable features of the independent claim. Accordingly, claims 8 and 9 are also patentable and the Applicant respectfully requests such disposition. However, these claims recite additional subject matter that further distinguishes from Crandall. For example, in claim 8, the Applicant recites sending blocked error information to the printer to indicate at least one type of error that may be ignored during the rasterization process. The Examiner states that such is taught in Crandall at column 6, lines 3 - 7. Here, Crandall merely teaches a structure that contains error data and corresponding remedial suggestions for electronic communication to third parties. Nothing, however, in these lines indicates that information is sent to a printer to indicate an error that may be ignored during the rasterization process. Accordingly, Crandall does not teach that which the Applicant claims in claim 8.

Claims 10 - 16

In claim 10, the Applicant recites receiving at a printer at least one preRIP command identifying a presentation object to be included in a print job and presentation parameters associated with the object. The method also includes, in response to the preRIP command, rasterizing the presentation object according to the presentation parameters and storing the

rasterized object in a cache accessible to the printer. As stated in the arguments for patentability of claims 1 and 7, Crandall does not teach rasterizing. Nor does Crandall teach receiving a preRIP command at a printer. Accordingly, Crandall does not teach that which the Applicant claims in claim 10. The Applicant therefore respectfully requests reconsideration and allowance of claim 10.

Claims 11 - 16 depend from independent claim 10 and inherit all of the patentable features of the independent claim. For at least these reasons, claims 11 - 16 are also patentable and the Applicant respectfully requests such disposition. However, these claims recite additional subject matter that further distinguishes from Crandall. For example, claim 16 recites receiving at a printer blocked error information identifying at least one type of error that may be stored during the rasterization process. As mentioned in the arguments in favor of patentability for claim 8, Crandall does not teach any type of information being sent to a printer to indicate an error that may be ignored during the rasterization process. Moreover, claim 16 recites, if an unblocked error occurs during the rasterization of the presentation object, aborting the rasterization and storing the original unrasterized object in the cache for rasterization at a print time. As mentioned in the arguments in favor of patentability for claim 4, Crandall does not teach ignoring errors associated with a print job such that rasterization is aborted until an object is printed during the print job. Accordingly, Crandall does not teach that which the Applicant claims in claim 16.

Claims 17 - 19

Claim 17 recites a computer readable storage media having embodied thereon computer program instructions effective when executing on a print server to perform the elements recited in claim 7. The Examiner rejected claim 17 for the same reasons recited in the rejection of claim 7 and, in doing so, failed to show where each claim limitation is taught. However, the Applicant maintains that the arguments in favor of patentability for claim 7 apply herein. The Applicant, therefore, respectfully requests reconsideration and allowance based on the arguments in favor of patentability for claim 7.

Claims 18 and 19 depend from independent claim 17 and inherit all of the patentable features of the independent claim. For at least these reasons, claims 18 and 19 are also patentable and the Applicant respectfully requests such disposition. However, these claims recite

additional subject matter that further distinguishes from Crandall. In this regard, claim 18 recites subject matter similarly recited in the method of claim 8. Accordingly, the arguments in favor of patentability for claim 8 apply herein and the Applicant respectfully requests reconsideration and allowance of claim 18 based on those arguments.

Claims 20 - 26

Claim 20 recites a computer readable storage media having embodied thereon computer program instructions effective when executing on a printer to perform the elements recited in claim 10. The Examiner rejected claim 20 for the same reasons recited in the rejection of claim 10. As mentioned in the arguments in favor of patentability for claim 10, Crandall does not teach rasterization. Crandall, therefore, does not teach that which the Applicant claims in claim 20. In this regard, the Applicant respectfully requests reconsideration and allowance of claim 20.

Claims 21 - 26 depend from independent claim 20 and inherit all of the patentable features of the independent claim. For at least these reasons, claims 21 - 26 are also patentable and the Applicant respectfully requests such disposition. However, these claims recite additional subject matter that further distinguishes from Crandall. For example, claim 26 recites receiving blocked error information identifying at least one type of error that may be ignored during the rasterization process. As mentioned in the arguments in favor of patentability for claim 8, Crandall does not teach any type of information that indicates an error that may be ignored during the rasterization process. Moreover, claim 26 recites, if an unblocked error occurs during the rasterization of the presentation object, the rasterization is aborted and the original unrasterized object is stored in the cache for rasterization at a print time. As mentioned in the arguments in favor of patentability for claim 4, Crandall does not teach ignoring errors associated with a print job such that rasterization is aborted until an object is printed during a print job. Accordingly, Crandall does not teach that which the Applicant claims in claim 26.

Claims 27 - 31

In claim 27, the Applicant recites an apparatus that includes a print job preprocessing module for identifying presentation objects in a print job to be preprocessed and at least one combination of presentation parameters associated therewith. The apparatus also includes a pre-rasterization module for rasterizing each presentation object according to the combination of

presentation parameters to create a pre-rasterized object. The apparatus also includes an identification module for associating with each pre-rasterized object an object label identifying the object and a parameter label identifying the parameters used in pre-rasterizing the object. The apparatus also includes a local cache for holding information accessibly to the apparatus and a caching module for storing the pre-rasterized object and the associated object label and parameter label in the local cache.

The Examiner rejected claim 27 based on the same reasons recited in the rejection of claim 1. The Applicant again respectfully disagrees as Crandall is not even directly associated with printing. Rather, Crandall relates to automatic "proofing" of a document before the document is transmitted. The Applicant's claims, on the other hand, recite a pre-rasterization module for rasterizing a presentation object (e.g., an image) to create a rasterized object. Crandall does not teach rasterizing any presentation objects to be included in a print job. Because Crandall does not teach that which the Applicant claims, claim 27 is patentable in view of Crandall and the Applicant respectfully requests such disposition.

Claims 28 - 31 depend from independent claim 27 and inherit all of the patentable features of the independent claim. For at least these reasons, claims 28 - 31 are also patentable and the Applicant respectfully requests such disposition.

Claims 32 - 34

In claim 32, the Applicant recites a print server that includes at least one application program for creating print jobs including presentation objects having presentation parameters defining the formatting applicable thereto. The print server also includes a print job processing module for recognizing the presentation objects in each combination of presentation parameters associated with each appearance of each presentation object within the current print job. The print job processing module also, for each combination, creates a preRIP command identifying the presentation object and the associated presentation parameters. The preRIP command directs a printer to rasterize the identified presentation object according to the identified combination of parameters and to cache the rasterized object for later printing. The print server also includes a communication module for communicating with an attached printer to send each preRIP command to the printer.

The Examiner rejected claim 32 based on the same reasons recited in the rejections of claims 1 and 7. As stated in the arguments for patentability of claims 1 and 7, Crandall does not teach rasterizing. Nor does Crandall teach a preRIP command that directs a printer to rasterize the identified object. Accordingly, Crandall does not teach that which the Applicant claims. Claim 32 is therefore patentable in view of Crandall and the Applicant respectfully requests such disposition.

Claims 33 and 34 depend from independent claim 32 and inherit all of the patentable features of the independent claim. For at least these reasons, claims 33 and 34 are also patentable and the Applicant respectfully requests such disposition. However, these claims recite additional subject matter that further distinguishes from Crandall. For example, claim 33 recites that the communication module further sends blocked error information to the printer indicating at least one type of error that may be ignored during the rasterization process. As mentioned in the arguments in favor of patentability for claim 8, nothing in Crandall indicates that information is sent to a printer to indicate an error that may be ignored during the rasterization process. Accordingly, Crandall does not teach that which the Applicant claims in claim 32.

Claims 35 - 40

In claim 35, the Applicant recites a printer that includes a communication module for receiving at least one preRIP command identifying a presentation object to be included in a print job and presentation parameters associated with the object. The printer also includes a cache storage accessible to the printer and a rasterization module for, in response to the preRIP command, rasterizing the presentation object according to the presentation parameters. The printer also includes a storage module for storing a rasterized object in the original unrasterized version of the object in the cache.

The Examiner rejected claim 35 based on the same reasons recited in the rejections of claim 1 and 7. As stated in the arguments in favor of patentability for claims 1 and 7, Crandall does not teach rasterizing. Nor does Crandall teach a communication module for receiving a preRIP command that identifies a presentation object to be included in a print job. Accordingly, Crandall does not teach that which the Applicant claims in claim 35. Claim 35 is, therefore, patentable in view of Crandall and the Applicant respectfully requests such disposition.

Claims 36 - 40 depend from independent claim 35 and inherit all of the patentable features of the independent claim. Accordingly, claims 36 - 40 are also patentable in view of Crandall and the Applicant respectfully requests such disposition. However, these claims recite additional subject matter that further distinguishes from Crandall. For example, claim 40 recites that the communication module further receives blocked error information identifying at least one type of error that may be ignored during the rasterization process. If the rasterization module detects an unblocked error during the rasterization of the presentation object, the rasterization is aborted. As mentioned in the arguments in favor of patentability for claim 16, Crandall does not teach receiving blocked error information identifying at least one type of error that may be ignored during the rasterization process. Accordingly, Crandall does not teach that which the Applicant claims in claim 40.

Conclusion

Claims 1- 40 are believed to be distinguished over the prior art of record. Applicants therefore respectfully request reconsideration and withdrawal of the rejections and the objections. Applicants believe no fees are due in this matter. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Respectfully submitted,

Date: 4/8/2008   _____ / Gregory T. Fettig / _____

Gregory T. Fettig (Reg. No. 50,843)
Duft Bornsen & Fishman, LLP
1526 Spruce Street, Suite 302
Boulder, CO 80302
(303) 786-7687
(303) 786-7691 (fax)